Claims:

What is claimed is:

1.   A system having first and second processes residing on first and second computers used with backup or restore operations, wherein said first and said second computers are in communication with a data storage system on a network, said system comprising:
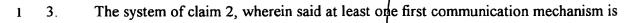
     at least one first communication mechanism residing on both said first and second computers for facilitating communications between said first and second processes over said network;

     a second communication mechanism residing on both said first and second computers for facilitating communication between said first and second processes through said data storage system; and

     means, within said first and second processes, for allowing said first and second processes to determine whether a call from said first and second processes is for first or second communication mechanism.

2.   The system of claim 1, wherein said first and second processes are part of a backup or restore process.
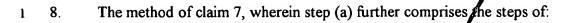
1 3.   The system of claim 2, wherein said at least one first communication mechanism is

2 a network socket.

1 4.   The system of claim 3, wherein said second communication mechanism is a data

2 storage system socket, and said data storage system socket allows information to be

3 transferred from said first process to said second process through said data storage

4 system.

1 5.   The system of claim 1, wherein said backup and restore operations are capable of

2 backing up and restoring information from file system or database applications.

1 6.   A method for assisting with backup and restore operations in a computer system,

2 the method comprising the steps of:

3   (a)   establishing at least one first connection over a network, between first and

4 second processes residing on different computers; and

5   (b)   establishing, in parallel with establishing said at least one first connection, a

6 second connection, through a data storage system, between said first and said second

7 processes.

1 7.   The method of claim 6, wherein step (a) comprises the step of:

2   creating a pair of communication mechanisms on a designated port.

1   8.   The method of claim 7, wherein step (a) further comprises the steps of:

2   requesting with one member of said communication mechanism pair a connection

3   to said other member of said communication mechanism pair; and

4   in response to said connection request, accepting said connection request.

1   9.   The method of claim 8, wherein step (a) further comprises the step of:

2   creating a second pair of communication mechanisms on the designated port,

3   wherein said second pair of communication mechanisms is used for transferring a different

4   type of information than would be transferred over said first pair of communication

5   mechanisms.

1   10.   The method of claim 9, wherein step (a) further comprises the steps of:

2   requesting with one member of said second pair of communication mechanisms, a

3   connection to said other member of said second pair of communication mechanisms; and

4   in response to said connection request, accepting said connection request.

1   11.   The method of claim 6, wherein step (b) comprises the steps of:

2   creating a third pair of communication mechanisms on a second designated port.

1   12.   The method of claim 11, wherein step (b) further comprises the steps of:

2   requesting with one member of said third pair of communications mechanisms a

3   connection to said other member of said second pair of communications mechanisms; and

4   in response to said connection request, accepting said connection request.

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1   13.   The method of claim 12, wherein step (b) further comprises the steps of:

2   receiving information about a group of resources in said data storage system;

3   in response to receiving information about said group of resources, creating a

4   fourth pair of communication mechanisms on a dynamically allocated port; and

5   connecting said fourth pair of communication mechanisms to each other through

6   said data storage system.

1   14.   The method of claim 6, wherein said backup and restore operations are for backing

2   up and restoring information from a file system application.

15.   A method for assisting with backup and restore operations in a computer system,

2   the method comprising:

3   establishing a connection, over a network, between a first process and a second

4   process residing on different computers;

5   receiving information about a dynamically allocated port over the established

6   connection;

7   establishing a second connection over the network, on the dynamically allocated

8   port, between said first and second processes;

9   identifying resources on a data storage devices to be used in order to transfer

10 information through said data storage device; and

11   establishing a connection between said first and second processes through said

12 data storage system.

1   16.   The method of claim 15, wherein said backup and restore applications are used in

2   conjunction with a database application.